

WHAT IS CLAIMED IS:

1. An optical module comprising:

an optical device assembly having an optical device
for converting one of optical and electric signals into the
other;

a circuit board for mounting an electronic device to
electrically connect with said optical device;

a lead frame having a lead pin, a board mounting part
for mounting said circuit board, and a support part which
are provided on a reference surface;

a holding member having a holding part for grasping
and holding said optical device assembly, and a grasping
part for grasping said support part of said lead frame; and

a resin member for encapsulating said optical device
assembly, said circuit board, said holding member, and said
lead frame.

2. An optical module according to claim 1, wherein
said grasping part has a base portion provided so as to extend
along said reference surface, and a pressing portion for
urging said support part of said lead frame toward said base
portion.

3. An optical module according to claim 2, wherein
said grasping part has a narrowest portion yielding a
narrowest width between said base portion and said pressing
portion, whereas the width between said base portion and
pressing portion in an end portion of said grasping part

on a side introduced to said support part is greater than that between said base portion and pressing portion in said narrowest portion.

4. An optical module according to claim 1, wherein an edge portion of said support part on a side where said grasping portion is introduced has a thickness smaller than that in the other portion.

5. An optical module according to claim 1, further comprising an auxiliary part for aiding in supporting said holding member provided on said reference surface.

6. An optical module according to claim 5, wherein said auxiliary part of said lead frame includes a positioning hole for positioning said holding member, whereas said holding member has a protrusion adapted to fit into said positioning hole.

7. An optical module according to claim 1, wherein said holding part of said holding member includes a pair of sheet spring members for holding said optical device assembly therebetween.

8. An optical module according to claim 1, wherein said optical device in said optical device assembly has an optical axis shifted from said reference surface.

9. An optical module according to claim 1, wherein said optical device assembly and said circuit board are electrically connected to each other by a bonding wire.

10. A method of making an optical module, said method

making the optical module according to claim 1 and comprising:

a step of mounting said circuit board onto said board mounting part of said lead frame;

5 a step of grasping said support part of said lead frame with said grasping part of said holding member and supporting said holding member displaceable along said reference surface;

a step of grasping and holding said optical device assembly with said holding part of said holding member;

10 a step of providing wire bonding between said optical device assembly and said circuit board; and

a step of encapsulating said optical device assembly, said circuit board, said lead frame, and said holding member with a resin.

15 11. A method of making an optical module according to claim 10, further comprising a step of positioning said holding member prior to said resin encapsulating step.

20 12. A method of making an optical module according to claim 10, wherein said grasping part of said holding member has a base portion and a pressing portion for urging said support part of said lead frame toward said base portion; and

wherein said step of supporting said holding member includes:

25 a step of engaging an edge portion of said support part between said base portion and said pressing portion; and

a step of pushing said holding member toward said support part.